

In the Claims

1 1. [Currently Amended] A laser scanning apparatus comprising:
2 a light source configured to ~~emit~~ generate a light beam in ~~a single~~
3 ~~direction~~;
4 a scanning device optically coupled with the light source and configured
5 to scan the light beam along a photoconductor in a plurality of scan lines; and
6 a start-of-scan detector assembly configured to sample the light beam
7 and initiate a start-of-scan operation of one of the scan lines of information to be
8 written on the photoconductor, and wherein the sampled light beam is used to
9 control a drive level of the light source.

1 2. [Original] The apparatus of claim 1, further comprising:
2 a control system configured to receive a signal from the detector
3 assembly and to control the drive level of the light source based on the signal.

1 3. [Original] The apparatus of claim 2, wherein the control system
2 comprises processing circuitry configured to compare an indication of the
3 sampled light beam from the signal with a predetermined value.

1 4. [Original] The apparatus of claim 2, wherein the control system is
2 configured to maintain the drive level of the light source at a predetermined drive
3 level during scanning of the one scan line.

1 5. [Original] The apparatus of claim 1, wherein the light source
2 comprises a vertical cavity surface emitting laser diode (VCSEL).

1 6. [Original] The apparatus of claim 1, wherein the light beam is sampled
2 only once per scan line of information written on the photoconductor, and the
3 light beam is sampled prior to writing the scan line of information on the
4 photoconductor.

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1 7. [Original] The apparatus of claim 1, wherein the scanning device
2 comprises a rotating polygon mirror.

1 8. [Original] The apparatus of claim 1, wherein the start-of-scan detector
2 assembly is disposed outside of a scan area of the photoconductor.

1 9. [Currently Amended] A laser scanning apparatus comprising:
2 a rotating scanning device configured to scan a light beam from a light
3 source;
4 a photodetector optically coupled with the rotating scanning device and
5 configured to sample the light beam from the rotating scanning device; and
6 a control system configured to receive an indication of the sampled light
7 beam from the photodetector and to control a drive level of the light source
8 responsive to the indication of the sampled light; and
9 wherein the control system is configured to maintain the light source at a
10 constant drive level during scanning of a single line of information on the
11 photoconductor.

1 10. [Original] The apparatus of claim 9, wherein the light source is
2 configured to emit light in a single direction.

1 11. [Original] The apparatus of claim 9, wherein the light source
2 comprises a vertical cavity surface emission laser diode (VCSEL).

1 12. [Original] The apparatus of claim 9, wherein the control system
2 comprises processing circuitry configured to compare an indication of the
3 sampled light beam with a predetermined drive level value, and to control the
4 drive level of the light source based on the comparison.

1 13. Cancel.

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1 14. [Currently Amended] A laser scanning apparatus comprising:
2 a laser configured to generate a light beam;
3 a scanning device configured to scan ~~[[a]]~~ the light beam from ~~a light~~
4 ~~source~~ the laser;
5 a photodetector optically coupled with the scanning device and
6 configured to sample the light beam only once per line of information scanned
7 onto a photoconductor; and
8 a control system configured to receive an indication of the sampled light
9 beam from the photodetector and to maintain a drive level of the ~~light source~~
10 laser at a constant drive level during scanning of the line of information onto the
11 photoconductor.

1 15. [Currently Amended] The apparatus of claim 14, wherein the ~~light~~
2 ~~source~~ laser is configured to emit a light beam in a single direction.

1 16. [Currently Amended] The apparatus of claim 14, wherein the
2 photodetector is utilized to initiate a start of scan operation of the line of
3 information.

1 17. [Original] The apparatus of claim 14, wherein the sampled light
2 beam is obtained before scanning a line of information onto the photoconductor.

1 18. [Currently Amended] A laser scanning apparatus comprising:
2 means for generating a light beam;
3 means for scanning ~~[[a]]~~ the light beam ~~from a light source~~ onto a
4 photoconductor;
5 means for sampling the light beam which causes information to be
6 scanned onto the photoconductor; and
7 means for receiving an indication of the sampled light beam from the
8 means for sampling and for maintaining the ~~light source~~ means for generating at
9 a constant drive level using the indication of the sampled light beam and during
10 scanning of the line of information onto the photoconductor.

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1 19. [Currently Amended] The apparatus of claim 18, wherein the light
2 ~~source is a vertical cavity surface emitting laser diode (VCSEL)~~ means for
3 generating comprises a laser.

1 20. [Original] The apparatus of claim 18, wherein the light beam is
2 sampled before writing a scan line of information onto the photoconductor.

1 21. [Original] The apparatus of claim 18, wherein the means for sampling
2 is disposed outside of a scan area of the photoconductor.

1 22. [Currently Amended] A laser scanning method comprising:
2 emitting generating a light beam ~~in a single direction~~ using a light source;
3 providing a rotating scanning device and a photoconductor;
4 scanning the light beam along the photoconductor using the rotating
5 scanning device;
6 sampling the light beam from the rotating scanning device using a
7 sampling assembly; and
8 ~~controlling a drive level of the light source~~ using responsive to the
9 sampled light beam.

1 23. [Original] The method of claim 22, further comprising:
2 initiating writing of a scan line of information onto the photoconductor
3 using the sampling assembly.

1 24. [Currently Amended] The method of claim 22, wherein the
2 controlling comprises:
3 receiving the sampled light beam in a control system;
4 comparing an indication of the sampled light beam with a predetermined
5 drive level value; and
6 wherein the controlling comprises controlling ~~the~~ a drive level of the light
7 source responsive to the comparison.

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1 25. [Original] The method of claim 22, further comprising:
2 maintaining an output power of the light source at a constant level during
3 writing of a single scan line of information onto the photoconductor.

1 26. [Original] The method of claim 22, wherein the light source
2 comprises a vertical cavity surface emitting laser diode (VCSEL).

1 27. [Original] The method of claim 22, wherein the sampling is
2 performed only once per scan line of information written on the photoconductor
3 and prior to writing the scan line of information on the photoconductor.

1 28. [Original] The method of claim 22, wherein the sampling assembly is
2 located outside of a scan area of the photoconductor.

1 29. [Currently Amended] A hard imaging device comprising:
2 a photoconductor;
3 a laser scanning apparatus configured to write scan lines of information
4 onto the photoconductor, the laser scanning apparatus comprising:
5 ~~a light source~~ laser configured to ~~emit~~ generate a light beam in ~~a~~
6 ~~single direction~~;
7 a scanning device optically coupled with the ~~light source~~ laser and
8 configured to scan the light beam along the photoconductor to form the scan
9 lines; and
10 a sampling assembly configured to sample the light beam ~~and to~~
11 ~~initiate start of scan operations to write the scan lines onto the photoconductor,~~
12 ~~and wherein the sampled light beam is used to control a drive level of the light~~
13 ~~source; and~~
14 a control system configured to control an intensity of the light
15 beam generated by the laser responsive to the sampled light beam; and
16 an image engine configured to form hard images from the written scan
17 lines using media.

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1 30. [Currently Amended] The device of claim 29, wherein the laser
2 ~~scanning apparatus further comprises:~~

3 ~~a control system configured to receive a signal from the sampling~~
4 ~~assembly and to control the drive level of the light source based on the received~~
5 signal control system is configured to receive a signal from the sampling
6 assembly corresponding to the sampled light beam and to control a drive level of
7 the light source based on the received signal.

1 31. [Original] An article of manufacture comprising:

2 processor-usable media comprising programming configured to cause
3 processing circuitry to:

4 output a control signal to control a light source configured to
5 generate a light beam used to scan a plurality of scan lines of information onto a
6 photoconductor;

7 access an output of a start-of-scan detector assembly generated
8 responsive to detection of the light beam thereby, wherein the output indicates
9 appropriate timing for initiation of writing of the information for the respective
10 scan lines;

11 process the output of the start-of-scan detector assembly; and

12 adjust the control signal responsive to the processing of the output
13 to adjust an intensity of the light beam generated by the light source.

1 32. [Original] The article of manufacture of claim 31, wherein the
2 programming is further configured to cause the processing circuitry to adjust the
3 control signal to provide the light beam having a substantially constant intensity
4 during the scanning of the scan lines.

1 33. [New] The apparatus of claim 1 wherein the light source
2 comprises a laser configured to generate the light beam.

1 34. [New] The apparatus of claim 33 wherein the laser is configured
2 to generate all of the photons of the light beam which is sampled by the
3 detector assembly.

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1 35. [New] The apparatus of claim 33 wherein the laser is configured
2 to generate the light beam void of any light received by the laser.

1 36. [New] The apparatus of claim 33 further comprising a control
2 system configured to provide a control signal to control the drive level of the
3 laser during the generation of the light beam, and wherein the control system is
4 configured to vary the control signal responsive to the sampled light beam.

1 37. [New] The apparatus of claim 1 wherein the light source is
2 configured to generate an entirety of the light beam for the first time, and
3 wherein the light beam is void of any other light generated by a source different
4 than the light source.

1 38. [New] The apparatus of claim 9 further comprising the light source
2 comprising a laser configured to generate the light beam.

1 39. [New] The apparatus of claim 14 wherein the control system is
2 configured to maintain the drive level of the laser responsive to the indication.

1 40. [New] The method of claim 22 wherein the generating comprises
2 generating using the light source comprising a laser, and the controlling
3 comprises controlling the laser using the sampled light beam.

1 41. [New] The method of claim 22 wherein the generating comprises
2 generating all light of the light beam using the light source.

1 42. [New] The method of claim 22 wherein the controlling comprises:
2 applying a control signal to control the light source; and
3 varying the control signal responsive to the sampled light beam.

1 43. [New] The method of claim 43 wherein the varying comprises
2 varying to control the light source to generate the light beam having a
3 substantially constant intensity.

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- 1 44. [New] The device of claim 29 wherein the sampling assembly is
- 2 configured to initiate start-of-scan operations to write the scan lines onto the
- 3 photoconductor.

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